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FORM**

(to be used for all correspondence after initial filing)

|                               |                     |
|-------------------------------|---------------------|
| <b>Applicati n Number</b>     | 10/717,785          |
| <b>Filing Date</b>            | 11/20/2003          |
| <b>First Named Invent r</b>   | Richard Veil et al. |
| <b>Group Art Unit</b>         |                     |
| <b>Examiner Name</b>          |                     |
| <b>Attorney Docket Number</b> | 4965-000168         |

Number of Pages in This Submission

**ENCLOSURES (check all that apply)**

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Fee Transmittal Form<br><br><input type="checkbox"/> Fee Attached<br><br><input type="checkbox"/> Amendment / Response<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><br><input type="checkbox"/> Extension of Time Request<br><br><input type="checkbox"/> Express Abandonment Request<br><br><input type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><br><input type="checkbox"/> Response to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application)<br><br><input type="checkbox"/> Drawing(s)<br><br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br><b>International Preliminary Examination Report; and postcard.</b> |
|---|---|---|

Remarks

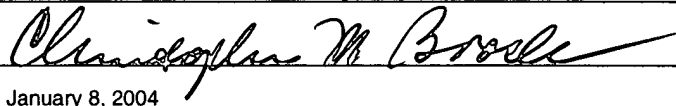
The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**Firm  
or  
Individual name

Harness, Dickey &amp; Pierce, P.L.C.

Attorney Name  
Christopher M. BrockReg. No.  
27313

Signature



Date

January 8, 2004

**CERTIFICATE OF MAILING/TRANSMISSION**

I hereby certify that this correspondence is being deposited with the United States Postal Service as express mail in an envelope addressed to: Director of the U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on the date indicated below.

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| Typed or printed name | Christopher M. Brock  | Express Mail Label No. | EV 406 075 745 US (1/8/2004) |
| Signature             |  | Date                   | January 8, 2004              |

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Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

|   |   |  |
|---|---|--|
| Applicant's or agent's file reference<br>4035P130WO - ML/ha                               | <b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |  |
| International application No.<br>PCT/EP02/02840   | International filing date (day/month/year)<br>14 March 2002 (14.03.02)  | Priority date (day/month/year)<br>22 May 2001 (22.05.01) |
| International Patent Classification (IPC) or national classification and IPC<br>F16P 3/00 |   |  |
| Applicant<br>PILZ GMBH & CO.  |   |  |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

|   |  |
|---|--|
| Date of submission of the demand<br>12 December 2002 (12.12.02) | Date of completion of this report<br>14 August 2003 (14.08.2003) |
| Name and mailing address of the IPEA/EP                         | Authorized officer   |
| Facsimile No.   | Telephone No.  |

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP02/02840

## I. Basis of the report

1. This report has been drawn on the basis of (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.):

☐ the international application as originally filed.

☒ the description, pages 1-16, as originally filed,  
 pages \_\_\_\_\_, filed with the demand,  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☒ the claims, Nos. 1-11, as originally filed,  
 Nos. \_\_\_\_\_, as amended under Article 19,  
 Nos. \_\_\_\_\_, filed with the demand,  
 Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
 Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☒ the drawings, sheets/fig 1/3-3/3, as originally filed,  
 sheets/fig \_\_\_\_\_, filed with the demand,  
 sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
 sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

2. The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/fig \_\_\_\_\_

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 02/02840

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. Statement

|                               |        |      |     |
|-------------------------------|--------|------|-----|
| Novelty (N)                   | Claims | 1-11 | YES |
|                               | Claims |      | NO  |
| Inventive step (IS)           | Claims | 1-11 | YES |
|                               | Claims |      | NO  |
| Industrial applicability (IA) | Claims | 1-11 | YES |
|                               | Claims |      | NO  |

## 2. Citations and explanations

1. Claim 1 relates to a safety switching module having a first and second switch control device, and a first switching element and a second switching element connected in series thereto, the first switching element being controllable by the first switch control device and the second by the second switch control device, and it being possible to test the switching-off capacity of at least one switching element using an evaluation and control device. Modules of this type are known in general.

In order to enable the switching-off capacity of the switching elements to be tested also for large currents to be switched and/or capacitive or inductive loads, third and fourth switching elements are provided that are arranged in series with respect to each other and in parallel to the first series connection and form a second current path, the third switching element being controllable by the first switch control device and the fourth switching element by the second switch control device, and the evaluation and control device testing the switching elements alternately in one of the current paths.

The above features are novel and industrially applicable and involve an inventive step, since none of the cited documents contains anything that suggests them.

2. Dependent Claims 2 to 10 contain advantageous embodiments of the safety switching module according to Claim 1 and therefore likewise meet the relevant requirements.

3. Claim 11 describes a method that corresponds to the above module and involves the following steps:

- providing a first current path having at least one switching element;
- providing a second current path having at least one switching element parallel to the first current path; and
- alternately testing the switching-off capacity of one of the two current paths, the current path that is not being tested supplying the load alone.

This method is likewise novel and industrially applicable and involves an inventive step, since none of the cited documents contains anything that suggests it.